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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Joseph A. King

Attorney file: 5783

Serial No.: 10/623,682

Examiner: Tsoy, Elena

Filed: 07/21/2003

Group: 1762

For: DELIVERY SYSTEM AND METHOD OF MAKING ARTICLE

I hereby certify that this correspondence is being deposited with the United States Postal Service by Express Mail, express mail no. EQ253787307 US, in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450 on 10-16-07 by applicant's attorney, Carl L. Johnson.

Carl L. Johnson

Carl L. Johnson

10-16-07

Date

REPLY BRIEF COVER LETTER

Honorable Commissioner for Patents

Alexandria, VA 22313-1450

Dear Sir:

Enclosed are three copies of a reply brief that the Appellant is submitting for the above-identified patent application in response to the Examiner's Answer pursuant to Rule 37 C.F.R. 41.41. Please charge any deficiency in fees to deposit account 10-0210.

Respectfully submitted,

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CLJ/tp
Enclosure



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For: DELIVERY SYSTEM AND METHOD OF MAKING ARTICLE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

REPLY BRIEF
TO THE EXAMINER'S ANSWER

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

I. STATUS OF CLAIMS

Claims 8 and 9 to a method of applying a water treatment composition to an article and claims 10 and 12 to a method of making an article for in situ water treatment are currently pending in the above-identified application and have all been rejected final. In regards to claims 1-7, 11 and 13-20, claims 11 and 13-20 have been withdrawn and claims 1-7 have been canceled from the present application and thus are not a part of the present appeal.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 8 and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by the reference KR 8902848, the reference of Minami (U.S. Patent No. 3,866,568) or the reference of Takahashi et al. (U.S. Patent No. 5,567,539).
2. Claims 8-10 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being made obvious by the reference JP78010390.
3. Claims 8 and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being made obvious by the reference of JP 78020780.
4. Claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848 in view of the reference of Oehler et al. (U.S. Patent No. 5,820,927).
5. Claims 8-10, and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848/JP78010390/JP78020780 in view of the reference of Rosenblatt (U.S. Patent No. 6,365,169).
6. Claim 10 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under U.S.C. 103(a) as being made obvious over the reference JP78020780.

III. ARGUMENT

Appellant has received and review the Examiner's Answer dated September 20, 2007 in support of the Examiner rejections of Appellant's claims 8 and 9 under 35 U.S.C. 102(b) as being anticipated by the reference KR 8902848, the reference of Minami (U.S. Patent No. 3,866,568) or the reference of Takahashi et al. (U.S. Patent No. 5,567,539); rejected claims 8-10 under 35 U.S.C. 102(b) as being anticipated by the reference JP78010390; rejected claims 8 and 9 under 35 U.S.C. 102(b) as being anticipated by the reference JP 78020780; rejected claims 8-10 under 35 U.S.C. 103(a) as being made obvious by the reference JP78010390; rejected claims 8 and 9 under 35 U.S.C. 103(a) as being made obvious by the reference JP 78020780; rejected claims 8 and 9 under 35 U.S.C. 103(a) as being unpatentable over KR 8902848 in view of the reference of Oehler et al. (U.S. Patent No. 5,820,927); rejected claims 8-10, and 12 under 35 U.S.C. 103(a) as being unpatentable over KR 8902848/JP 78010390/JP 78020780 in view of the reference of Rosenblatt (U.S. Patent No. 6,365,169); and rejected claim 10 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under U.S.C. 103(a) as being made obvious over the reference JP78020780. The Appellant respectfully disagree with the Examiner's Answer of September 20, 2007 in support of the Examiner's rejection of Appellant's claims 8, 9, 10, and 12 for the following reasons.

1. **The references of KR 8902848, the reference of Minami and the reference of Takahashi et al. each do not teach the step of applying a metal ion yielding material in particle form to the adhesive on the web.**

Appellant's method claims 8 and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by the reference KR 8902848, the reference of Minami (U.S. Patent No. 3,866,568) or the reference of Takahashi et al. (U.S. Patent No. 5,567,539). Appellant's method claims 8 and 9 each call for a method of applying a water treatment composition to an article including the step of:

“...applying a metal ion yielding material in particle form to the adhesive on the web” (Emphasis added.)

The Appellant respectfully submits that a review of the references of Minami and Takahashi et al. reveal that the references of Minami and Takahashi et al. each do not teach the step of applying metal ion yielding materials in particle form to an adhesive on a web as called for in Appellant's independent method claim 8. The aforementioned is supported on page 5, lines 3-5 of the Office Action dated April 11, 2006, wherein the Examiner commented that:

“...each of Minami and Takahashi et al is applied not for teaching the step of applying metal ions yielding materials in particle form to an adhesive on a web, but as evidence to confirm the Examiner's interpretation of the term “drying” of holt [hot] metal adhesive.” (Emphasis added.)

On page 8, lines 18-20 of the Examiner's Reply dated September 20, 2007, the Examiner stated:

“The Examiner does not understand from the Applicant's remarks why the Examiner could not cite Minami and Takahashi et al. as evidence.”

In response to the Examiner's above comment, the Appellant does not disagree with the Examiner that the Examiner can cite Minami and Takahashi et al. as evidence, however the Appellant respectfully submits that Appellant's claims 8 and 9 is allowable over both the reference of Minami and the reference of Takahashi et al. as the references of Minami and Takahashi et al. each do not teach a feature of Appellant's claims 8 and 9, namely "... the step of applying metal ions yielding materials in particle form to an adhesive on a web..."

In the case of *Atlas Powder Co. v. IRECO Inc.*, the Federal Circuit held:

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." Emphasis added, see *Atlas Powder Co. v. IRECO Inc.*, 51 USPQ2d 1943, 1945 (Fed. Cir. 1999), citing *In re Schreiber*, 44 USPQ 1429, 1477 (Fed. Cir. 1997)

In view of *Atlas Powder Co. v. IRECO Inc.*, it is respectfully submitted that since the references of Minami and Takahashi et al each is applied not for teaching the step of applying metal ions yielding materials in particle form to an adhesive on a web as called for in Appellant's method claims 8 and 9, the Appellant respectfully submits that Appellant's method claims 8 and 9 are allowable over the references of Minami and Takahashi et al.

In regards to the references KR 8902848, the Examiner is currently also rejecting Appellant's claims 8 and 9 under 35 U.S.C. 102(b) as being anticipated by the reference KR 8902848. The Appellant respectfully submits that the KR 8902848 reference also does not teach "... the step of applying metal ions yielding materials in particle form to an adhesive on a web..." as called for in Appellant's method claims 8 and 9

In regards to the KR 8902848 reference's disclosure of the adhesive, the Appellant respectfully submits under *In re Oelrich*¹ that the mere disclosure of an adhesive coating the inner side of the nonwoven fabrics is not sufficient to lead to the conclusion that the silver-added active carbon and untreated active carbon of the KR 8902848 reference are actually applied to the adhesive. Instead, the Appellant's respectfully notes that the KR 8902848 reference actually teaches away from the application of the active carbons to the adhesive through the disclosure that the mesh formed by KR 8902848's fabrics 11' and 11'' already functions to prevent the active carbon from escaping or releasing from KR 8902848's filter 8.

In *ATD Corp. v. Lydall, Inc.*, the Federal Circuit held that in order for a reference to anticipate, the:

“... anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed and that its existence was recognized by persons of ordinary skill in the field of the invention.”²
(Emphasis added.)

In view of *ATD Corp. v. Lydall, Inc.*, the Appellant respectfully submits that the KR 8902848 reference does not anticipate Appellant's method claims 8 and 9 as the reference KR 8902848 does not describe with sufficient clarity and detail the use and function of the

¹ *In re Oelrich*, 212 USPQ 323, 326 (C.C.P.A.) (quoting *Hasggirg v. Kemmer*, 40 USPQ 665, 667 (C.C.P.A. 1939) (“Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”)

² *ATD Corp. v. Lydall, Inc.*, 48 USPQ 2d 1321, 1328 (Fed. Cir. 1998)

adhesive so as to anticipate the step of "...applying a metal ion yielding material in particle form to the adhesive on the web" of Appellant's method claims 8 and 9.

In further regards to the reference KR 8902848, the Examiner on page 4, lines 16-20 of the Office Action dated April 11, 2006, stated:

"..., the translated text (See USPTO translation) describes the relevant part as follows: "When forming the filter 8, one side of the non-woven fabric 11' and 11'' is coated with an adhesive, and the adhesive-coated side is **fusion bonded to the activated carbon** to fix the activated carbon" (See page 4, lines 20-22)."

In further support of the above, the Examiner on page 4, lines 15-22 of the Examiner's Reply dated September 20, 2007, further stated:

"KR 8902848 discloses a method of making a sterilizing and water-cleaning filter comprising applying an adhesive to the inner side of permeable upper and lower nonwoven fabrics 11' and 11'' (claimed step a of applying an adhesive to a web of material); filling a silver treated activated carbon (claimed metal ion yielding material in particle form) and untreated activated carbon *alternatively* between the upper and lower nonwoven fabrics 11' and 11'' (See **Abstract**); and fusion-bonding the adhesive-coated side to the activated carbon (claimed step b of applying the metal ion yielding material in particle form to the adhesive on the web) to fix the activated carbon to the web arranging."

The Appellant respectfully submits that the above disclosure of the fusion bonding of activated carbon to a side of KR 8902848's non-woven fabric containing an adhesive coating does not anticipate the Appellant's step of applying of metal ion yielding material in particle form to the adhesive. It is respectfully submitted that the reference of KR 8902848 is unclear whether the activated carbons are fusion bonded to the adhesive or the non-woven fabric itself. It is more likely that the reference KR 8902848 teaches that the activated carbons are fusion bonded to the non-woven fabric itself and not to the adhesive

as the generally adhesion properties of an adhesive would alleviate the need for fusion bonding if KR 8902848's activated carbon were applied directly to KR 8902848's adhesive. Further note that although the reference KR 8902848 (in the abstract) discloses in parentheses that the inner side of the nonwoven fabrics is coated with adhesive, the Appellant respectfully submits that the adhesive cited in KR 8902848 is for bonding KR 8902848's sheets of fabrics 11' and 11'' together to prevent the sheets of fabrics 11' and 11'' from blistering. (See page 4 of the Appellant's translation of the KR 8902848 reference.)

The Appellant further submits that the KR 8902848 reference teaches away from the use of an adhesive to secure the silver-added active carbon and untreated active carbon to fabrics 11' and 11'' through the disclosure on page 4, lines 24-26 of the Appellant's translation of the KR 8902848 reference that:

“... the mesh of the fabrics is finer than the activated carbon, which thereby is prevent from being release.”

In view of KR 8902848's above disclosure, the Appellant respectfully submits that there lacks a need for securement of the silver-added active carbon and untreated active carbon to KR 8902848's fabrics 11' and 11'' as the mesh formed by fabrics 11' and 11'' already functions to prevent the silver-added active carbon and untreated active carbon from escaping or releasing from filter 8. (See Figures 3, 4, 5, and 6 of the KR 8902848 reference.)

It is for the above reasons that the Appellant submits that the references of KR 8902848, the reference of Minami and the reference of Takahashi et al. each do not teach the step of applying a metal ion yielding material in particle form to the adhesive on the web and that Appellant's method claims 8 and 9 are allowable over the reference KR 8902848, the reference of Minami and the reference of Takahashi et al.

2. **The reference of JP 78010390 does not teach the steps of applying an adhesive to the water insoluble solid structure, forming the solid structure into an article for placement into a body of water, or forming the structure into an article for placement into a body of water.**

Claims 8-10 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being made obvious by the reference JP78010390.

Appellant's method claim 10 calls for a method of making an article for in situ water treatment including the steps of:

“... applying the adhesive to the water insoluble solid structure to form at least a partial coating thereon;
applying the water treatment material to the adhesive on said solid structure;
allowing the adhesive to set to thereby secure the water treatment material to the solid structure; and
forming the structure into an article for placement into a body of water to thereby enable the structure to adhesively support the water treatment material thereon in a condition that maintains a water concentration of metal ions less than 1000 parts per billion (ppb).” (Emphasis added.)

On page 4, lines 15-22 of the Examiner's Reply dated September 20, 2007, in further support of the Examiner's rejection of Appellant's method claim 10, the Examiner stated:

“As to claim 10, it is well known in the art that AgCl is used as a water-insoluble silver salt in water purification systems. As the adhesive (22), epoxy resin adhesives are used, but it goes without saying that, besides these, **any** adhesive can be used as long as it exhibits good affinity with the flexible resin substrate to be used.”

The Appellant respectfully disagrees with the Examiner's above statement regarding the use of AgCl as the water insoluble solid structure. It is submitted that AgCl is generally used in water purification systems as a source of water treatment material. In view of the

aforementioned, the Appellant respectfully submits that the use of AgCl as the water insoluble solid structure teaches away from the step of "... applying the adhesive to the water insoluble solid structure to form at least a partial coating thereon;" and the step of "... applying the water treatment material to the adhesive on said solid structure;" as called for in Appellant's claim 10 as there would be no need to apply a water treatment material to a structure that is already comprises a source of water treatment material.

It is for the above reasons that the Appellant respectfully submits that the reference of JP 78010390 does not teach the steps of Appellant's independent method claim 10.

3. **The combination of the references of the KR 8902848/JP 78010390/JP 78020780 in view of the reference of Rosenblatt in view of the reference of Rosenblatt each do not teach the step of applying a metal ion yielding material in particle form to the adhesive on the web or the step of allowing the adhesive to dry to secure the metal ion yielding material to the web of material or the step of allowing the adhesive to set to thereby secure the water treatment material to the solid structure.**

Appellant's independent method claims 8 and 9 each calls for a method of applying a water treatment composition to an article including the step of "... applying a metal ion yielding material in particle form to the adhesive on the web..." and the step of "... allowing the adhesive to dry to secure the metal ion yielding material to the web of material." (Emphasis added.) Appellant's independent method claim 10 calls for a method of making an article for insitu water treatment including the step of:

"... applying the water treatment material to the adhesive on said solid structure; allowing the adhesive to set to thereby secure the water treatment material to the solid structure;" (Emphasis added.)

On page 3, lines 15-18 of the Office Action dated April 11, 2006, the Examiner rejected Appellant's claims 8-10 and 12 under U.S.C. 103(a) as being unpatentable over KR 8902848/JP 78010390/JP 78020780 in view of the reference of Rosenblatt (U.S. Patent No. 6,365,169). In support of the Examiner's aforementioned rejection, the Examiner on page 6, lines 1-3 stated:

"Rosenblatt teaches curing (setting) of his PVA with iodine **and other antimicrobial components** in order to secure the iodine **and other antimicrobial components** to Rosenblatt's substrate (See column 8, lines 9)."

On page 7, lines 3-8 of the Examiner's Reply dated September 20, 2007, in further support of the Examiner's rejection of Appellant's method claim 10, the Examiner stated:

"Rosenblatt teaches that a curable PVA (i.e. PVA together with a curing agent) solution (See column 3, lines 39-42) may be used for fixing iodine to a substrate by spraying first the PVA solution to the substrate (See column 3, lines 39-40) then spraying iodine over partially dried insolubilized PVA (See column 6, lines 9-16) to make water filters (See column 8, lines 11-12). In other words, Rosenblatt is applied to show that PVA adhesives are *suitable* for making water filters and can be applied by spraying and cured together with antimicrobial component."

The Appellant strenuously but respectfully disagrees with the Examiner's above statements. The Appellant respectfully submits that Rosenblatt's column 8, lines 11-12 does not teach the curing or setting of Rosenblatt's PVA with iodine to Rosenblatt's substrate. Rosenblatt's column 8, lines 11-12 instead teaches curing Rosenblatt's various substrates to provide Rosenblatt's substrates with "...iodine complexing potential...", that is (referring back to column 3, lines 43-45 of Rosenblatt) the ability to complex "...with an iodine solution containing excess iodine."

In further regards to the Examiner's above rejection, the Appellant respectfully notes that the reference of Rosenblatt does not call for the application of iodine, which Rosenblatt uses as a disinfectant, to the PVA locate on Rosenblatt's substrate in particle form. Rosenblatt instead teaches the "complexing" of iodine in solution or liquid form to Rosenblatt's substrate. (See column 3, lines 43-45 of Rosenblatt.) The Appellant respectfully submits that the application of iodine to a substrate in particle form is different from the "complexing" of iodine to a substrate in solution or liquid form.

The Appellant also submits that using PVA, as taught by Rosenblatt, in KR 8902848 and Minami or Takahaski et al. as an adhesive does not make the above mentioned limitations of Appellant's claim 8-10 obvious as the reference Rosenblatt teaches that the PVA is dried and cured to the Rosenblatt's substrate before the iodine is applied thereto. (See column 3, lines 39-45 of Rosenblatt.) More specifically, in column 3, lines 39-45, Rosenblatt states:

“The cured PVA impregnated substrate is washed, if necessary, and is then complexed with iodine solution containing excess iodine. The sponge is rinsed out to flush out the excess iodine.”

It is for the above reasons that the Appellant respectfully submits that Appellant's claims 8-10 is allowable over the references of KR 8902848 and Minami or Takahaski et al in view of the reference of Rosenblatt.

4. The reference of JP78020780 does not teach the step of applying the water treatment material to the adhesive on said solid structure of claim 10.

Appellant's claim 10 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under U.S.C. 103(a) as being made obvious over the reference JP78020780.

Appellant's claim 10 calls for a "... method of applying a water treatment composition to an article ..." including the step of:

"...applying the water treatment material to the adhesive on said solid structure..."
(Emphasis added.)

On page 3, lines 21-23 and page 4, lines 1-6 of the Office Action dated April 11, 2006, in support of the Examiner's rejection of Appellant's claim 10 under U.S.C. 102(b) as being anticipated by the reference JP 78020780, the Examiner stated:

"... Translation of JP 78020780 shows that the silver-salt-containing powder (21) is bonded to a substrate 23 by means of adhesive (22) in such a way as to **expose** the powder as shown at Fig. 6 (See page 7, lines 10-16)." Clearly, to expose the powder as shown as Fig. 6, the powder should be adhered to applied adhesive. Or it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied an adhesive to a substrate then a silver-salt-containing powder in JP 78020780 (JP 53020780) with the expectation of providing the desired exposed powder."

The Appellant respectfully disagrees with the Examiner's above statement as the Examiner's translation of JP78020780 does not clearly teach the step of "...applying the water treatment material to the adhesive on said solid structure..." as called for in Appellant's method claim 10. The Appellant submits that it is not clear or obvious from the teaching of JP 78020780 to have applied an adhesive to a substrate and then a silver-salt-containing powder in order to expose the powder. For example, the Appellant respectfully directs the Examiner's attention to page 9, lines 1-9 of the Examiner's

translation of JP 78020780, which explains JP 78020780's method of producing the sterilization device wherein:

“... glass is pulverized and run through 150 mesh. To this glass is added AgNO₃, AgCl, and Ag metal powder discretely and mixed, and each resulting mixture is formed by a press under a pressure of 50 kg/cm²... To this powder is added an epoxy resin to form an enamel, and it is printed on a substrate comprised of Mylar film and baked at 100 °C for 2 hours.” (Emphasis added.)

On page 16, lines 15-19 of the Examiner's Reply dated September 20, 2007, in further support of the Examiner's rejection of Appellant's method claim 10, the Examiner stated:

“Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiment. See MPEP 2123. Therefore, the alternative methods of applying a silver-salt-containing powder to a substrate through the use of an adhesive (i.e. an epoxy resin) without first applying the adhesive to the substrate cannot overcome anticipation rejection over JP 78020780.”

In response to the Examiner's above statement, the Appellant submits that since the reference of JP 78020780 teaches alternative methods of applying a silver-salt-containing powder to a substrate through the use of an adhesive (i.e. an epoxy resin) without first applying the adhesive to the substrate but is not clear to the teaching of the application of an adhesive to a substrate and then a silver-salt-containing powder in order to expose the powder, the Appellant respectfully submits that the teaching of JP 78020780 does not meet the anticipation standards of sufficient clarity and detail of *ATD Corp. v. Lydall, Inc.*, to support the Examiner's rejection of Appellant's independent claim 10.

It is for the above reasons that the Appellant respectfully submits that Appellant's claim 10 is allowable over the JP 78020780 reference.

In further regards to Appellant's claims 9 and 12, Appellant's dependent claim 9 depends on Appellant's independent claim 8 and Appellant's dependent claim 12 depends on Appellant's independent claim 10. Since Appellant's independent claim 8 and Appellant's independent claim 10 are allowable for the reasons given above, Appellant's dependent claims 9 and 12 should also be allowable.

In summary, it is respectfully submitted that the Examiner was incorrect in rejecting Appellant's claims 8 and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by the reference KR 8902848, the reference of Minami (U.S. Patent No. 3,866,568) or the reference of Takahashi et al. (U.S. Patent No. 5,567,539; claims 8-10 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being made obvious by the reference JP78010390; claims 8 and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being made obvious by the reference of JP 78020780; claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848 in view of the reference of Oehler et al. (U.S. Patent No. 5,820,927; claims 8-10, and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over KR 8902848/JP 78010390/JP 78020780 in view of the reference of Rosenblatt (U.S. Patent No. 6,365,169; and claim 10 stand rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under U.S.C. 103(a) as being made obvious over the reference JP78020780. Accordingly, it is respectfully

requested that the decision of the Examiner be reversed and that Appellant's claims 8, 9, 10, and 12 be allowed.

Respectfully submitted,

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By



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Enclosures

IV. CLAIMS APPENDIX

Claims involved in the appeal:

1 - 7. (Canceled)

8. (Previously Presented) A method of applying a water treatment composition to an article comprising the steps of:

- a) applying an adhesive to a web of material;
- b) applying a metal ion yielding material in particle form to the adhesive on the web;
- c) allowing the adhesive to dry to secure the metal ion yielding material to the web of material; and
- d) forming the particle containing web into an article for use in water purification.

9. (Original) The method of claim 8 wherein the particle containing web is formed into a filter.

10. (Original) A method of making an article for insitu water treatment comprising the steps of:

selecting a water treatment material from the group consisting of zinc sulfate, zinc carbonate, zinc chloride, copper chloride, copper carbonate, copper sulfate, silver chloride, stannous chloride and stannic chloride;

selecting an adhesive from the group consisting of polyurethane, epoxy resin, polyvinyl acetate and polyvinyl alcohol;

selecting a water insoluble solid structure;

applying the adhesive to the water insoluble solid structure to form at least a partial coating thereon;

applying the water treatment material to the adhesive on said solid structure;

allowing the adhesive to set to thereby secure the water treatment material to the solid structure; and

forming the structure into an article for placement into a body of water to thereby enable the structure to adhesively support the water treatment material thereon in a condition that maintains a water concentration of metal ions less than 1000 parts per billion (ppb).

11. (Withdrawn) The method of claim 10 wherein the selected adhesive and selected water treatment material are combined in a slurry and simultaneously coated onto the structure using a die coater.

12. (Original) The method of claim 10 wherein the selected adhesive is sprayed on the solid structure and the selected water treatment material is applied to the adhesive on the structure.

13. (Withdrawn) The method of claim 10 wherein the selected adhesive is roll coated onto the structure and the selected water treatment material is applied to the roll coated adhesive on the structure.

14. (Withdrawn) The method of claim 10 wherein the selected adhesive is die coated onto the structure and the selected water treatment material is applied to the die coated adhesive on the structure.
15. (Withdrawn) The method of claim 10 wherein the solid structure is immersed into the selected adhesive and the selected water treatment material is applied to the adhesive after the structure is removed from the adhesive.
16. (Withdrawn) The method of claim 10 wherein the selected adhesive applied to the solid structure is limited by a knife and the selected water treatment material is applied to the adhesive on the structure.
17. (Withdrawn) The method of claim 10 wherein the selected adhesive is roll coated onto the structure and the selected water treatment material is roll coated on the adhesive on the structure.
18. (Withdrawn) A process of making a water treatment composition including the steps of:
- a) mixing a first amount of silver nitrate into a first batch of water to form a silver nitrate mixture;
 - b) mixing a first amount of sodium chloride into the silver nitrate mixture to form a silver chloride mixture;
 - c) mixing an adhesive securable to both silver chloride and to support particles into a second batch of water to form an adhesive mixture;

- d) combining the silver chloride mixture and the adhesive mixture to form an adhesive silver chloride mixture;
- e) applying the adhesive silver chloride mixture to support particles; and
- f) curing the adhesive silver chloride mixture insitu on the support particles to form support particles having a coating containing silver chloride.

19. (Withdrawn) The process of making a water treatment composition according to claim 18 wherein mixing an adhesive into a second batch of water includes mixing polyvinyl acetate adhesive into a second batch of water.

20. (Withdrawn) The process of making a water treatment composition according to claim 18 wherein mixing an adhesive into a second batch of water includes mixing polyurethane adhesive into a second batch of water.